

Title (en)

METHOD AND DEVICE FOR THE COMBINED PRODUCTION OF COMPONENTS BY MEANS OF INCREMENTAL SHEET FORMING AND ADDITIVE METHODS IN ONE CLAMPING SETUP

Title (de)

VERFAHREN UND VORRICHTUNG ZUR KOMBINIERTEN HERSTELLUNG VON BAUTEILEN MITTELS INKREMENTELLER BLECHUMFORMUNG UND ADDITIVER VERFAHREN IN EINER AUFSPANNUNG

Title (fr)

PROCÉDÉ ET DISPOSITIF DE PRODUCTION COMBINÉE D'ÉLÉMENTS AU MOYEN D'UN FORMAGE INCRÉMENTAL DE TÔLES ET DE PROCÉDÉS ADDITIFS EN UNE SEULE PASSE

Publication

EP 3197633 A1 20170802 (DE)

Application

EP 15777863 A 20150901

Priority

- DE 102014014202 A 20140922
- DE 2015000442 W 20150901

Abstract (en)

[origin: WO2016045651A1] The invention relates to a method and a device suitable for carrying out the method for producing components (21) by means of incremental sheet forming (5) and additive methods (3), in particular by means of laser cladding, in which the component (21) is at least locally transformed into a formed finished part geometry (21) by means of incremental sheet forming (5) of a sheet starting material (1), and before and/or during and/or thereafter, material accumulations (14) are applied to and/or bonded to the sheet starting material (1) and/or to the formed finished part geometry (21) at least locally by means of additive methods, in particular by laser cladding methods, in the same clamping setup of the component (21). In addition, prior to and/or during and/or subsequent to the use of additive methods (3) on the sheet starting material (1), a cutting (12, 13) and/or forming (11) finishing of the local material accumulations (14) can be carried out, in particular to increase the dimensional and geometrical accuracy of the local material accumulations (14) or of the formed sheet sections of the component (21).

IPC 8 full level

B21D 31/00 (2006.01); **B23K 26/342** (2014.01); **B23P 15/00** (2006.01); **B23P 23/04** (2006.01)

CPC (source: EP)

B21D 31/005 (2013.01); **B23K 26/0093** (2013.01); **B23K 26/0823** (2013.01); **B23K 26/0884** (2013.01); **B23K 26/14** (2013.01); **B23K 26/342** (2015.10); **B23K 37/0235** (2013.01); **B23P 15/00** (2013.01); **B23P 23/04** (2013.01); **B23K 2103/04** (2018.07)

Citation (search report)

See references of WO 2016045651A1

Cited by

CN109622960A

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

DE 102014014202 A1 20160324; EP 3197633 A1 20170802; EP 3197633 B1 20190501; EP 3197633 B8 20190911; WO 2016045651 A1 20160331

DOCDB simple family (application)

DE 102014014202 A 20140922; DE 2015000442 W 20150901; EP 15777863 A 20150901